

Navistar International
Transportation Corp.

3033 Wayne Trace
PO Box 10088
Fort Wayne IN 46850-0088



INTERNATIONAL

RECEIVED
99 APR 26 AM 9:41
OFFICE
DEFECTS INVESTIGATION

April 12, 1999

Associate Administrator for Enforcement
National Highway Traffic Safety Administration
400 Seventh Street S.W.
Washington, D.C. 20590

**Subject: Navistar Safety Recall No. 99501
DOT No. 99V-033.001**

Gentlemen:

Customer notification date is 04/12/99

Also, please find enclosed:

three (3) copies of Dealer Service Letter
three (3) copies of Customer Notification Letter
three (3) copies of Authorization for Recall Service card

Respectfully,

NAVISTAR INTERNATIONAL
TRANSPORTATION CORP.

R. L. Van Laar
Compliance Manager

Enclosures

Certified Mail # Z 276 409 838
cc: J. A. Gaylord - NTEC

NAVISTAR



INTERNATIONAL VEHICLE RECALL

G-89501

April, 1999

**SUBJECT: VEHICLE RECALL (U.S., EXPORT)
Tie Rod Separation on 6000 & 8000 #
Capacity Dana Spicer Steer Axle**

DEFECT DESCRIPTION

The tie rod ends can loosen, pull outboard or even separate from the tie rod tube due to improper thread surface contact between the male tie rod end and the female tube. Insufficient clamp load on the tube clamp nut could also be a contributing factor. A separation of the tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

MODELS INVOLVED

1552, 1652, 3400, 3600, 3800, 4700, and 4900 built from 5/1/98 through 10/31/97 with a Dana Spicer 6000 or 8000 pound rated capacity steer axle.

OWNER NOTIFICATION

Navistar will notify owners of this campaign on their vehicles. A copy of the owner letter is attached. A listing of owner names and addresses has been furnished to the involved dealers to enable dealers to follow up with owners to have the vehicles corrected. You must limit the use of this listing to this campaign since the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

SERVICE PROCEDURE

TIE ROD ASSEMBLY REPLACEMENT

1. Remove complete tie rod assembly from vehicle.
2. Make sure tie rod arm hole and ball stud surface is clean and free of nicks.
3. Install new tie rod assembly and torque left and right ball stud nuts to 80 ft lbs. If cotter pin cannot be installed, tighten nut to the next opening on the castellated nut that will permit cotter pin installation.
4. Install cotter pin in left and right ball stud nut and bend end of cotter pin over to lock position.
5. Grease tie rod ends.

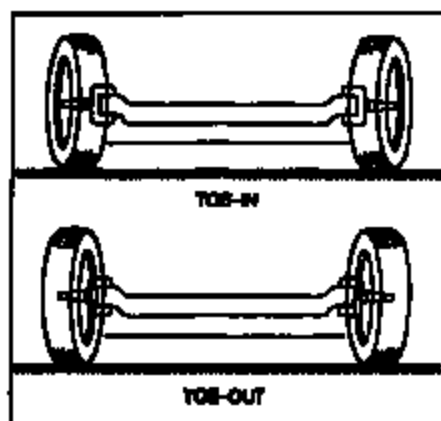
SERVICE PROCEDURE (Continued)

6. Set front axle toe-in to $1/16$ inch \pm $1/16$ inch. Toe-in should be set only by trained mechanics.

SETTING TOE-IN

NOTE: If electronic equipment is used to set toe-in, the equipment must be in calibration to insure an accurate toe reading.

The following procedure may be used to set toe-in when electronic alignment equipment is not available. To obtain an accurate reading, two mechanics are required to insure that the pointers are always placed or adjusted to be exactly in front of the line scribed on both tires. Toe-in is the amount in fractions of an inch that the front wheels are closer together at the front than at the back (Figure 1).



(as viewed from front of vehicle)

Figure 1

1. Block rear wheel.
2. Jack up front axle.
3. Wipe off excess dirt and moisture from the center of both front tire treads complete 360°. Use a piece of caulk or white spray paint to mark the center area of both tires around the complete circumference.
4. Put a scribe or pointed instrument against the center of the whitened area of each tire and rotate the tires 360°. The scribe must be held in place so that a single thin straight line is marked all the way around the tires.

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

5. Put a floating radius gauge plate under each wheel. Lower the vehicle and remove the lock pins from the radius gauge plates to allow the front wheels to return to the normal operating position. If full floating radius gauges plates are not available, lower the vehicle to the floor and roll it forward 12 to 15 feet (3.65 to 4.57 m) to neutralize the front suspension. Neutralizing the front suspension is extremely important especially if the vehicle has been jacked up to scribe the tires; otherwise, the front wheels will not return to the normal operation position due to the tires gripping the floor surface when the vehicle is lowered.
6. Set the sliding scale end of the trammel bar to zero (0) (Figure 2) and lock the scale in place.

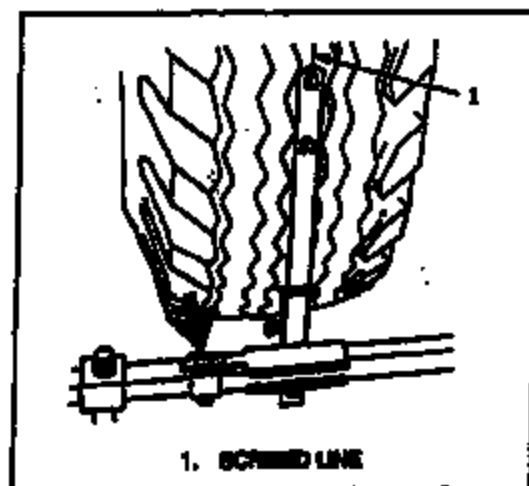


Figure 2

7. Put the trammel bar at the rear of the front tires so that the sliding scale that was set to zero in step 6 is centered against the scribed line on one of the tires (Figure 2).
8. Adjust the pointer on the end of the trammel bar opposite the sliding scale so it lines up with the scribed line on the rear of the opposite front tire. Lock the pointer in place on the trammel bar. Remove the trammel bar being careful not to contact either of the pointers.
9. Put the trammel bar against the front of the tires so the pointer end is aligned against the scribed line on the front tire. Loosen and remove the sliding scale pointer on the opposite end of the trammel bar so it is also aligned against the scribed line on the opposite tire. Lock the scale in place (Figure 3).

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

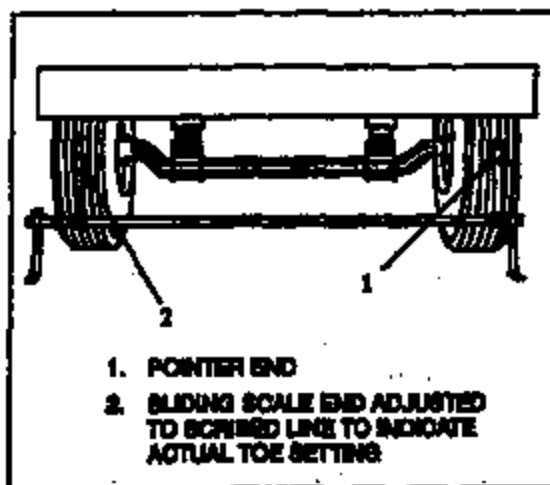


Figure 3

10. Read the toe-in or toe-out on the sliding scale. If toe-in is correct, it will read $1/16 \pm 1/16$ inch (0 – $1/8$ inch toe-in).

11. If toe-in is within the specification, position and tighten tie-rod clamps to 70-85 ft lbs.

If toe-in adjustment is necessary, use the following procedure:

1. Loosen the tie rod clamps that secure the tie rod ends in position in the tie rod.
2. Turn the tie rod to set the toe-in.
3. Turn the steering wheel in each direction to center the steering linkage (if the vehicle has power steering, start the engine before turning wheel). Make sure the front wheels are in a straight ahead position (stop engine), and re-check the toe-in setting by repeating "SETTING TOE-IN" steps 6 through 10.
4. Repeat above steps 2 and 3 until the toe-in reading is $1/16 \pm 1/16$ inch.
5. Position and tighten tie rod clamps to 70-85 ft lbs.



PARTS INFORMATION

Tie rod assemblies will be shipped direct from Dana Corporation (Included with the new tie rod will be a shipping label for returned parts). Tie rods should be ordered from Dana Corporation using the Fax form attached to this letter. The Fax form should be reproduced locally.

REMOVED PARTS DISPOSITION

Removed tie rod assembly must be returned to Dana Corporation using the returned parts shipping label provided with the new tie rod.

HANDLING ALLOWANCE

Since parts for this campaign are being supplied on a "no charge" basis, a \$40 dealer handling charge will be allowed. This charge should be submitted as an outside charge on the Warranty Claim as "Handling Allowance".

LABOR INFORMATION

Operation No.	Description	Time
A40-99501-1	Replace Tie Rod Assembly and Set Toe-in	0.8 Hr

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with Campaign G-99501 will require a CTS-1075 Campaign Identification Label.

Attach the CTS-1075 label on a clean surface next to the vehicle identification number (VIN) plate.



ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your dealer location.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his vehicle as soon as possible.

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

GROUP	NOUN	C	WARR	TP	PAD
99501		2	40	P	100

GROUP Enter Recall Number 99501

NOUN Leave Blank.

C (CAUSE) Enter either 1, 2, or 3.

1. Inspected (No repair Required).
2. Inspected and repaired.
3. Defective part from parts stock.

WARRANTY (Warranty Code) Enter 40.

TYPE PART Enter P for type part causing failure.

PAD Enter 100.

ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your distributor location.

Export locations are to submit warranty claims in the usual manner making reference to Safety Recall G-99501. We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

Distribution: All Dealers

Reproduction: Not Required

**NAVISTAR VEHICLE RECALL 99501
TIE ROD PART NUMBER 080TR109-2**

ORDERING LOCATION: _____ **Date** _____
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____
TELE NO. () _____ **PERSON ORDERING** _____

SHIP TO:
SAME AS ABOVE: YES (OR) NO – IF NO, SHIP TO:
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____

VIN (last 8 positions)	VIN (last 8 positions)	VIN (last 8 positions)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Tie rods will be shipped via freight to the ship to address indicated above.

FAX THIS ORDER FORM TO THE FOLLOWING NUMBER:

Fax : (405) 671-8396

PHONE CONTACT – 24 HOURS (405) 671-8350
(Special Voice-mail Backup – press "0" for assistance during the day)

NOTE: Dana will be tracking tie rod assemblies by VIN and the location where sent. A copy of this order form will be returned to you with your new tie rod assemblies.

Navistar International
Transportation Corp.

455 North Cityfront Plaza Drive
Chicago Illinois 60611
Telephone 312 838-2000

NAVISTAR.

SAFETY RECALL 99501

April, 1999

Dear International Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Navistar International Transportation Corp. has determined that a defect related to motor vehicle safety exists with the front steer axle tie rod on your vehicle.

The defect exists on 1552, 1652, 3400, 3600, 3800, 4700, and 4900 vehicle models equipped with a 8000 or 8000 pound rated capacity steer axle and built from 5/1/96 through 10/31/97.

REASON FOR THIS RECALL

If you are the owner, this is to notify you that the front steer axle tie rod on your vehicle can have a defect, which if not corrected, can allow the tie rod end to separate from the tie rod tube. The separation of a tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

ACTION YOU SHOULD TAKE

Navistar estimates that dealers will have parts to correct vehicles with this defect by April 12, 1999. After that date, you are requested to contact your International dealer for an appointment to bring your vehicle, along with the enclosed card, to your dealer to remedy the defect. The remedy will be to replace the front steer axle tie rod assembly. The repair will require approximately 0.8 hour of repair time.

IMPORTANT - PLEASE NOTE

If the vehicle will not or cannot be corrected, please mark on the enclosed card under "CHECK ONE", the box which best describes why the vehicle will not be repaired and return the postage-prepaid card to us. In the event you no longer own the vehicle described on the card, please fill in the new customer name and address, if known, and return it to us. This information will allow us to update our records so that you will not be contacted again regarding this recall.

(OVER PLEASE)

IF YOU NEED ASSISTANCE

If you take your vehicle to your International dealer on a mutually agreed upon service date, and he does not remedy this condition without charge on that date or within five days, you can obtain assistance by following the procedure described in the Owner Assistance Guide section in your Owner's Manual or by calling toll free 1-800-448-7825. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC, 20590, or call the toll-free Auto Safety Hot Line at 1-800-424-9393 (Washington, DC area residents may call 366-0123) if your dealer or International fails or is unable to remedy this condition without charge or within a reasonable time.

We request your prompt attention to correction of this defect and apologize for any inconvenience it may cause you.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

Navistar International
Transportation Corp.

465 North Cityfront Plaza Drive
Chicago Illinois 60611
Telephone 312 838-2000

NAVISTAR.

SAFETY RECALL 99501

April, 1999

Dear International Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Navistar International Transportation Corp. has determined that a defect related to motor vehicle safety exists with the front steer axle tie rod on your vehicle.

The defect exists on 1552, 1852, 3400, 3600, 3800, 4700, and 4900 vehicle models equipped with a 6000 or 8000 pound rated capacity steer axle and built from 5/1/96 through 10/31/97.

REASON FOR THIS RECALL

If you are the owner, this is to notify you that the front steer axle tie rod on your vehicle can have a defect, which if not corrected, can allow the tie rod end to separate from the tie rod tube. The separation of a tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

ACTION YOU SHOULD TAKE

Navistar estimates that dealers will have parts to correct vehicles with this defect by April 12, 1999. After that date, you are requested to contact your International dealer for an appointment to bring your vehicle, along with the enclosed card, to your dealer to remedy the defect. The remedy will be to replace the front steer axle tie rod assembly. The repair will require approximately 0.8 hour of repair time.

IMPORTANT - PLEASE NOTE

If the vehicle will not or cannot be corrected, please mark on the enclosed card under "CHECK ONE", the box which best describes why the vehicle will not be repaired and return the postage-prepaid card to us. In the event you no longer own the vehicle described on the card, please fill in the new customer name and address, if known, and return it to us. This information will allow us to update our records so that you will not be contacted again regarding this recall.

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We request your prompt attention to correction of this defect and apologize for any inconvenience it may cause you.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.



INTERNATIONAL[®] AUTHORIZATION FOR RECALL SERVICE

MODEL NAME	VEHICLE IDENTIFICATION NUMBER (VIN)	TER	DEALER CODE	CMPAID NO.

VEHICLE OWNER -

Please take the vehicle described above and this card to the selling International dealer for service described in the accompanying letter. The dealer has been provided instructions for repairing the vehicle. If the location of the selling dealer is not convenient for you, please contact your nearest International dealer.

CHANGE OF OWNERSHIP - Vehicle sold to:

NAME		
STREET		
CITY	STATE	ZIP CODE

VEHICLE OWNER - Please Note

Please check one of the following blocks concerning this Vehicle and drop card in mail.

- 1 ☐ Vehicle Inspected - no corrections necessary
- 2 ☐ Vehicle Corrections completed.
- 3 ☐ Vehicle Sold or Transferred.
(Please complete CHANGE of OWNERSHIP block)
- 4 ☐ Service not desired on this vehicle.
Reason: _____
- 5 ☐ Vehicle scrapped (junked). Will not return to public streets or highways.
- 6 ☐ Vehicle stolen (whereabouts unknown).
- 7 ☐ Vehicle exported from U.S. to another country.
(Please complete CHANGE of OWNERSHIP block)

SIGNATURE _____

DATE _____



BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO 229 PALATINE IL

POSTAGE WILL BE PAID BY ADDRESSEE

NAVISTAR INTERNATIONAL
TRANSPORTATION CORP.
PO BOX 907
PALATINE IL 60078-9986

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



99V-033.001



INTERNATIONAL[®] VEHICLE RECALL

G-99501

April, 1999

SUBJECT: VEHICLE RECALL (U.S., EXPORT)
Tie Rod Separation on 6000 & 8000 #
Capacity Dana Spicer Steer Axle

DEFECT DESCRIPTION

The tie rod ends can loosen, pull outboard or even separate from the tie rod tube due to improper thread surface contact between the male tie rod end and the female tube. Insufficient clamp load on the tube clamp nut could also be a contributing factor. A separation of the tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

MODELS INVOLVED

1552, 1652, 3400, 3600, 3800, 4700, and 4900 built from 5/1/96 through 10/31/97 with a Dana Spicer 6000 or 8000 pound rated capacity steer axle.

OWNER NOTIFICATION

Navistar will notify owners of this campaign on their vehicles. A copy of the owner letter is attached. A listing of owner names and addresses has been furnished to the involved dealers to enable dealers to follow up with owners to have the vehicles corrected. You must limit the use of this listing to this campaign since the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

SERVICE PROCEDURE

TIE ROD ASSEMBLY REPLACEMENT

1. Remove complete tie rod assembly from vehicle.
2. Make sure tie rod arm hole and ball stud surface is clean and free of nicks.
3. Install new tie rod assembly and torque left and right ball stud nuts to 80 ft lbs. If cotter pin cannot be installed, tighten nut to the next opening on the castellated nut that will permit cotter pin installation.
4. Install cotter pin in left and right ball stud nut and bend end of cotter pin over to lock position.
5. Grease tie rod ends.

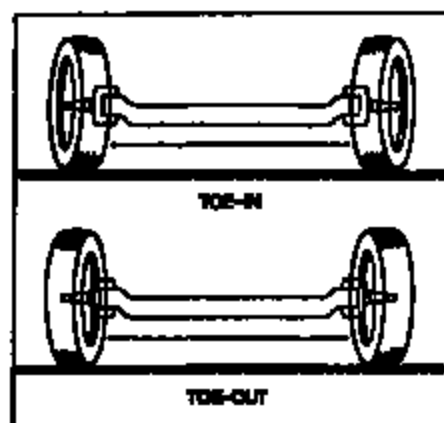
SERVICE PROCEDURE (Continued)

6. Set front axle toe-in to $1/16$ inch \pm $1/16$ inch. Toe-in should be set only by trained mechanics.

SETTING TOE-IN

NOTE: If electronic equipment is used to set toe-in, the equipment must be in calibration to insure an accurate toe reading.

The following procedure may be used to set toe-in when electronic alignment equipment is not available. To obtain an accurate reading, two mechanics are required to insure that the pointers are always placed or adjusted to be exactly in front of the line scribed on both tires. Toe-in is the amount in fractions of an inch that the front wheels are closer together at the front than at the back (Figure 1).



(as viewed from front of vehicle)

Figure 1

1. Block rear wheel.
2. Jack up front axle.
3. Wipe off excess dirt and moisture from the center of both front tire treads complete 360°. Use a piece of caulk or white spray paint to mark the center area of both tires around the complete circumference.
4. Put a scribe or pointed instrument against the center of the whitened area of each tire and rotate the tires 360°. The scribe must be held in place so that a single thin straight line is marked all the way around the tires.

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

5. Put a floating radius gauge plate under each wheel. Lower the vehicle and remove the lock pins from the radius gauge plates to allow the front wheels to return to the normal operating position. If full floating radius gauges plates are not available, lower the vehicle to the floor and roll it forward 12 to 15 feet (3.65 to 4.57 m) to neutralize the front suspension. Neutralizing the front suspension is extremely important especially if the vehicle has been jacked up to scribe the tires; otherwise, the front wheels will not return to the normal operation position due to the tires gripping the floor surface when the vehicle is lowered.
6. Set the sliding scale end of the trammel bar to zero (0) (Figure 2) and lock the scale in place.

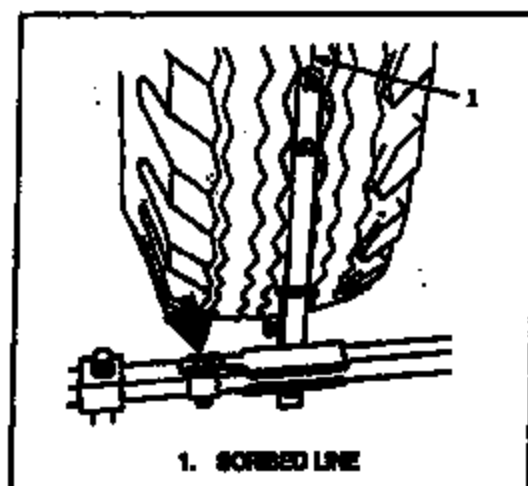


Figure 2

7. Put the trammel bar at the rear of the front tires so that the sliding scale that was set to zero in step 6 is centered against the scribed line on one of the tires (Figure 2).
8. Adjust the pointer on the end of the trammel bar opposite the sliding scale so it lines up with the scribed line on the rear of the opposite front tire. Lock the pointer in place on the trammel bar. Remove the trammel bar being careful not to contact either of the pointers.
9. Put the trammel bar against the front of the tires so the pointer end is aligned against the scribed line on the front tire. Loosen and remove the sliding scale pointer on the opposite end of the trammel bar so it is also aligned against the scribed line on the opposite tire. Lock the scale in place (Figure 3).

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

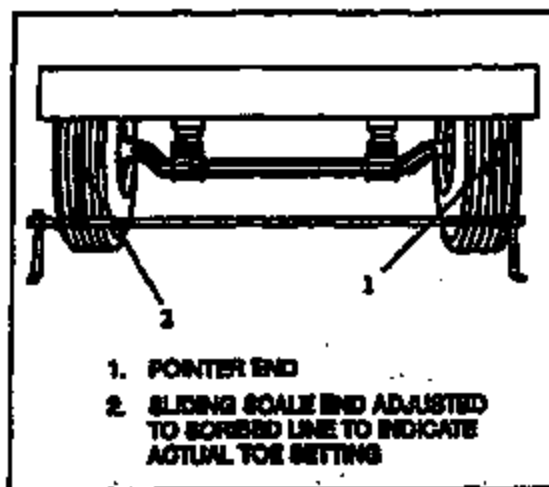
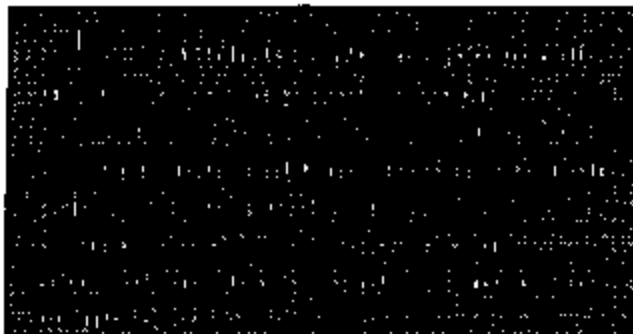


Figure 3

10. Read the toe-in or toe-out on the sliding scale. If toe-in is correct, it will read $1/16 \pm 1/16$ inch (0 – $1/8$ inch toe-in).
11. If toe-in is within the specification, position and tighten tie-rod clamps to 70-85 ft lbs.

If toe-in adjustment is necessary, use the following procedure:

1. Loosen the tie rod clamps that secure the tie rod ends in position in the tie rod.
2. Turn the tie rod to set the toe-in.
3. Turn the steering wheel in each direction to center the steering linkage (If the vehicle has power steering, start the engine before turning wheel). Make sure the front wheels are in a straight ahead position (stop engine), and re-check the toe-in setting by repeating "SETTING TOE-IN" steps 6 through 10.
4. Repeat above steps 2 and 3 until the toe-in reading is $1/16 \pm 1/16$ inch.
5. Position and tighten tie rod clamps to 70-85 ft lbs.



PARTS INFORMATION

Tie rod assemblies will be shipped direct from Dana Corporation (included with the new tie rod will be a shipping label for returned parts). Tie rods should be ordered from Dana Corporation using the Fax form attached to this letter. The Fax form should be reproduced locally.

REMOVED PARTS DISPOSITION

Removed tie rod assembly must be returned to Dana Corporation using the returned parts shipping label provided with the new tie rod.

HANDLING ALLOWANCE

Since parts for this campaign are being supplied on a "no charge" basis, a \$40 dealer handling charge will be allowed. This charge should be submitted as an outside charge on the Warranty Claim as "Handling Allowance".

LABOR INFORMATION

Operation No.	Description	Time
A40-99501-1	Replace Tie Rod Assembly and Set Toe-In	0.8 Hr

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with Campaign G-99501 will require a CTS-1075 Campaign Identification Label.

Attach the CTS-1075 label on a clean surface next to the vehicle identification number (VIN) plate.



ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your dealer location.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his vehicle as soon as possible.

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

GROUP	NOUN	C	WARR	TP	PAD
99501		2	40	P	100

GROUP Enter Recall Number 99501

NOUN Leave Blank.

C (CAUSE) Enter either 1, 2, or 3.

1. Inspected (No repair Required).
2. Inspected and repaired.
3. Defective part from parts stock.

WARRANTY (Warranty Code) Enter 40.

TYPE PART Enter P for type part causing failure.

PAD Enter 100.

ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

Proceed immediately to make necessary correction to units in Inventory. All Inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your distributor location.

Export locations are to submit warranty claims in the usual manner making reference to Safety Recall G-99501. We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

Distribution: All Dealers

Reproduction: Not Required

**NAVISTAR VEHICLE RECALL 99501
TIE ROD PART NUMBER 080TR109-2**

ORDERING LOCATION: _____ **Date** _____
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____
TELE NO. () _____ **PERSON ORDERING** _____

SHIP TO:
SAME AS ABOVE: YES (OR) NO – IF NO, SHIP TO:
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____

VIN (last 8 positions)	VIN (last 8 positions)	VIN (last 8 positions)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Tie rods will be shipped via freight to the ship to address indicated above.

FAX THIS ORDER FORM TO THE FOLLOWING NUMBER:

Fax : (405) 671-8396

PHONE CONTACT – 24 HOURS (405) 671-8350
(Special Voice-mail Backup – press "0" for assistance during the day)

NOTE: Dana will be tracking tie rod assemblies by VIN and the location where sent. A copy of this order form will be returned to you with your new tie rod assemblies.

Navistar International
Transportation Corp.

465 North Cityfront Plaza Drive
Chicago Illinois 60611
Telephone 312 636-2000

NAVISTAR

SAFETY RECALL 89501

April, 1999

Dear International Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Navistar International Transportation Corp. has determined that a defect related to motor vehicle safety exists with the front steer axle tie rod on your vehicle.

The defect exists on 1552, 1652, 3400, 3600, 3800, 4700, and 4900 vehicle models equipped with a 6000 or 8000 pound rated capacity steer axle and built from 5/1/96 through 10/31/97.

REASON FOR THIS RECALL

If you are the owner, this is to notify you that the front steer axle tie rod on your vehicle can have a defect, which if not corrected, can allow the tie rod end to separate from the tie rod tube. The separation of a tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

ACTION YOU SHOULD TAKE

Navistar estimates that dealers will have parts to correct vehicles with this defect by April 12, 1999. After that date, you are requested to contact your International dealer for an appointment to bring your vehicle, along with the enclosed card, to your dealer to remedy the defect. The remedy will be to replace the front steer axle tie rod assembly. The repair will require approximately 0.8 hour of repair time.

IMPORTANT - PLEASE NOTE

If the vehicle will not or cannot be corrected, please mark on the enclosed card under "CHECK ONE", the box which best describes why the vehicle will not be repaired and return the postage-prepaid card to us. In the event you no longer own the vehicle described on the card, please fill in the new customer name and address, if known, and return it to us. This information will allow us to update our records so that you will not be contacted again regarding this recall.

(OVER PLEASE)

IF YOU NEED ASSISTANCE

If you take your vehicle to your International dealer on a mutually agreed upon service date, and he does not remedy this condition without charge on that date or within five days, you can obtain assistance by following the procedure described in the Owner Assistance Guide section in your Owner's Manual or by calling toll free 1-800-448-7825. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC, 20590, or call the toll-free Auto Safety Hot Line at 1-800-424-9393 (Washington, DC area residents may call 365-0123) if your dealer or International fails or is unable to remedy this condition without charge or within a reasonable time.

We request your prompt attention to correction of this defect and apologize for any inconvenience it may cause you.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.



INTERNATIONAL VEHICLE RECALL

SUBJECT: G-99501 Safety Recall Revision A

June, 1999

Safety Recall letter G-99501 has been revised to Rev A. Changes were made to the following 3 sections of the original G-99501 Dealer letter.

1. REMOVED PARTS DISPOSITION

CHANGE: Dana Corporation's phone number (405-671-8350) was added to this section. Call this number if you have any questions about returning tie rods to Dana Corporation. This phone number is still on the attached Parts Order Fax Form.

REASON: To clarify any questions about the shipping labels and instructions provided with each tie rod call 405-671-8350.

2. HANDLING ALLOWANCE

CHANGE: This allowance will be added automatically to Warranty Claims from Dealer accounts for campaign 99501. The \$40 allowance should NOT be added as an outside charge on Warranty Claims for campaign 99501.

REASON: This will insure that each Dealer Warranty Claim for campaign 99501 receives the allowance through the normal Warranty Claim process without having to make a special adjustment request. However, for those claims that have already been processed without the \$40 allowance please send in a copy of the original claim requesting an adjustment. **DO NOT SUBMIT A NEW CLAIM.**

3. LABOR INFORMATION

CHANGE: Added labor operation number A40-99501-2 which adds 0.3 hours for Low Profile models. Be sure to have both labor operation 1 and 2 on all claims for Low Profile models. Claims for Low Profile models that have already been submitted will be automatically credited the 0.3 hours. Do not submit a request for adjustment or a new claim for these previously processed claims.

REASON: Time studies have determined that accessibility issues and the time required for vehicle raising and lowering operations on Low Profile models may add up to three tenths of an hour to the original eight tenths allowed in labor operation A40-99501-1. Additional studies have also determined that eight tenths of an hour is appropriate for all other models involved with campaign 99501. Therefore, all future Low Profile claims will require both labor operations 1 and 2 for a total of 1.1 hours.

NOTES:

1. The disposition for this recall can not be a 1. In other words the number one box on the recall card should NOT be checked for campaign 99501.
2. This cover letter along with the attached G-99501 Revision A letter is intended to replace the original G-99501 Dealer letter.



INTERNATIONAL® VEHICLE RECALL

G-99501: Revision A

June, 1999

**SUBJECT: VEHICLE RECALL (U.S., EXPORT)
Tie Rod Separation on 6000 & 8000 #
Capacity Dana Spicer Steer Axle**

DEFECT DESCRIPTION

The tie rod ends can loosen, pull outboard or even separate from the tie rod tube due to improper thread surface contact between the male tie rod end and the female tube. Insufficient clamp load on the tube clamp nut could also be a contributing factor. A separation of the tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

MODELS INVOLVED

1552, 1652, 3400, 3600, 3800, 4700, and 4900 built from 5/1/96 through 10/31/97 with a Dana Spicer 6000 or 8000 pound rated capacity steer axle.

OWNER NOTIFICATION

Navistar will notify owners of this campaign on their vehicles. A copy of the owner letter is attached. A listing of owner names and addresses has been furnished to the involved dealers to enable dealers to follow up with owners to have the vehicles corrected. You must limit the use of this listing to this campaign since the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

SERVICE PROCEDURE

TIE ROD ASSEMBLY REPLACEMENT

1. Remove complete tie rod assembly from vehicle.
2. Make sure tie rod arm hole and ball stud surface is clean and free of nicks.
3. Install new tie rod assembly and torque left and right ball stud nuts to 80 ft lbs. If cotter pin cannot be installed, tighten nut to the next opening on the castellated nut that will permit cotter pin installation.
4. Install cotter pin in left and right ball stud nut and bend end of cotter pin over to lock position.
5. Grease tie rod ends.

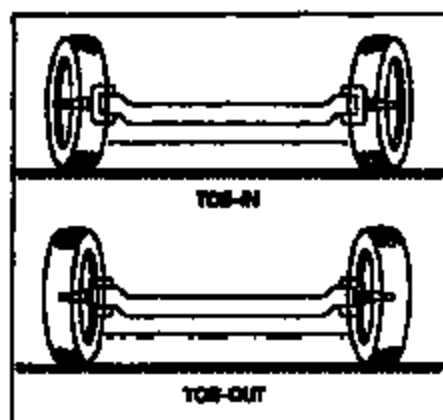
SERVICE PROCEDURE (Continued)

6. Set front axle toe-in to $1/16$ inch \pm $1/16$ inch. Toe-in should be set only by trained mechanics.

SETTING TOE-IN

NOTE: If electronic equipment is used to set toe-in, the equipment must be in calibration to insure an accurate toe reading.

The following procedure may be used to set toe-in when electronic alignment equipment is not available. To obtain an accurate reading, two mechanics are required to insure that the pointers are always placed or adjusted to be exactly in front of the line scribed on both tires. Toe-in is the amount in fractions of an inch that the front wheels are closer together at the front than at the back (Figure 1).



(as viewed from front of vehicle)

Figure 1

1. Block rear wheel.
2. Jack up front axle.
3. Wipe off excess dirt and moisture from the center of both front tire treads complete 360°. Use a piece of caulk or white spray paint to mark the center area of both tires around the complete circumference.
4. Put a scribe or pointed instrument against the center of the whitened area of each tire and rotate the tires 360°. The scribe must be held in place so that a single thin straight line is marked all the way around the tires.

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

5. Put a floating radius gauge plate under each wheel. Lower the vehicle and remove the lock pins from the radius gauge plates to allow the front wheels to return to the normal operating position. If full floating radius gauges plates are not available, lower the vehicle to the floor and roll it forward 12 to 15 feet (3.65 to 4.57 m) to neutralize the front suspension. Neutralizing the front suspension is extremely important especially if the vehicle has been jacked up to scribe the tires; otherwise, the front wheels will not return to the normal operation position due to the tires gripping the floor surface when the vehicle is lowered.
6. Set the sliding scale end of the trammel bar to zero (0) (Figure 2) and lock the scale in place.

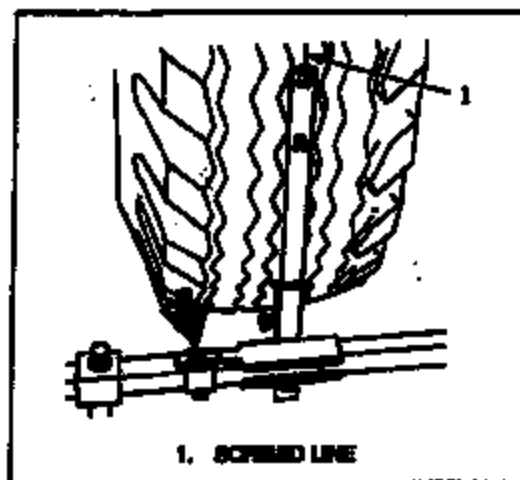


Figure 2

7. Put the trammel bar at the rear of the front tires so that the sliding scale that was set to zero in step 6 is centered against the scribed line on one of the tires (Figure 2).
8. Adjust the pointer on the end of the trammel bar opposite the sliding scale so it lines up with the scribed line on the rear of the opposite front tire. Lock the pointer in place on the trammel bar. Remove the trammel bar being careful not to contact either of the pointers.
9. Put the trammel bar against the front of the tires so the pointer end is aligned against the scribed line on the front tire. Loosen and remove the sliding scale pointer on the opposite end of the trammel bar so it is also aligned against the scribed line on the opposite tire. Lock the scale in place (Figure 3).

SERVICE PROCEDURE (Continued)

SETTING TOE-IN

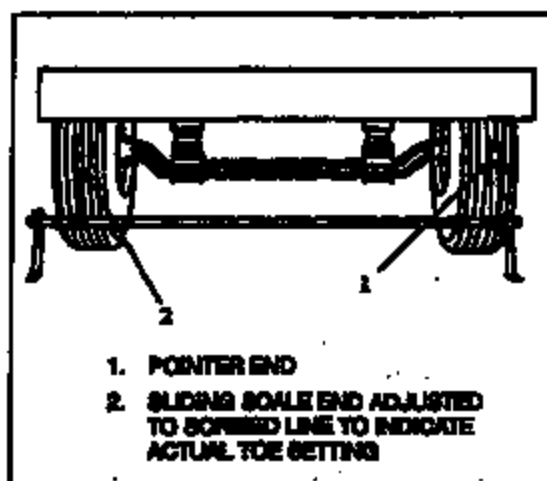


Figure 3

10. Read the toe-in or toe-out on the sliding scale. If toe-in is correct, it will read $1/16 \pm 1/16$ inch (0 – $1/8$ inch toe-in).
11. If toe-in is within the specification, position and tighten tie-rod clamps to 70-85 ft lbs.

If toe-in adjustment is necessary, use the following procedure:

1. Loosen the tie rod clamps that secure the tie rod ends in position in the tie rod.
2. Turn the tie rod to set the toe-in.
3. Turn the steering wheel in each direction to center the steering linkage (if the vehicle has power steering, start the engine before turning wheel). Make sure the front wheels are in a straight ahead position (stop engine), and re-check the toe-in setting by repeating "SETTING TOE-IN" steps 6 through 10.
4. Repeat above steps 2 and 3 until the toe-in reading is $1/16 \pm 1/16$ inch.
5. Position and tighten tie rod clamps to 70-85 ft lbs.



PARTS INFORMATION

Each new tie rod assembly will be shipped direct from Dana Corporation with a shipping label for returning the removed tie rod. Order tie rods using the Fax form attached to this letter. Reproduce the fax form locally.

REMOVED PARTS DISPOSITION

Return all removed tie rods to Dana Corporation. To avoid any shipping charges, be sure to use the shipping label provided with each new tie rod. Please write the vehicle's VIN number on each shipping label. If you have questions regarding shipping parts to Dana Corporation call 405-671-8350.

HANDLING ALLOWANCE

Since the tie rods are being direct shipped from the supplier on a "no charge" basis, a \$40 handling allowance will automatically be credited to Dealer accounts for each Warranty Claim processing Safety Recall 99501. No outside charges should be on Warranty Claims for this allowance.

LABOR INFORMATION

Operation No.	Description	Time
A40-99501-1	Replace Tie Rod Assembly and Set Toe-In	0.8 Hr
A40-99501-2	Additional time for Low Profile models	0.3 Hr

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with Campaign G-99501 will require a CTS-1075 Campaign Identification Label. Attach the CTS-1075 label on a clean surface next to the vehicle identification number (VIN) plate.



ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your dealer location.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his vehicle as soon as possible.

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

GROUP	NOUN	C	WARR	TP	PAD
99501		2	40	P	100

GROUP Enter Recall Number 99501

NOUN Leave Blank.

C (CAUSE) Enter either 1, 2, or 3.

1. Inspected (No repair Required).
2. Inspected and repaired.
3. Defective part from parts stock.

WARRANTY (Warranty Code) Enter 40.

TYPE PART Enter P for type part causing failure.

PAD Enter 100.

ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, transfer location or customer must be notified from your distributor location.

Export locations are to submit warranty claims in the usual manner making reference to Safety Recall G-99501. We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

Distribution: All Dealers

Reproduction: Not Required

**NAVISTAR VEHICLE RECALL 99501
TIE ROD PART NUMBER 080TR109-2**

ORDERING LOCATION: _____ **Date** _____
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____
TELE NO. () _____ **PERSON ORDERING** _____

SHIP TO:
SAME AS ABOVE: YES (OR) NO – IF NO, SHIP TO:
NAME _____
ADDRESS _____
CITY _____ **STATE** _____ **Zip** _____

VIN (last 8 positions) **VIN (last 8 positions)** **VIN (last 8 positions)**

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The rods will be shipped via freight to the ship to address indicated above.

FAX THIS ORDER FORM TO THE FOLLOWING NUMBER:

Fax : (405) 671-8396

PHONE CONTACT – 24 HOURS (405) 871-8350
(Special Voice-mail Backup – press "0" for assistance during the day)

NOTE: Dana will be tracking tie rod assemblies by VIN and the location where sent. A copy of this order form will be returned to you with your new tie rod assemblies.

Navistar International
Transportation Corp.

455 North Cityfront Plaza Drive
Chicago Illinois 60611
Telephone 312 836-2000

NAVISTAR.

SAFETY RECALL 99501

April, 1999

Dear International Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Navistar International Transportation Corp. has determined that a defect related to motor vehicle safety exists with the front steer axle tie rod on your vehicle.

The defect exists on 1552, 1652, 3400, 3600, 3800, 4700, and 4900 vehicle models equipped with a 6000 or 8000 pound rated capacity steer axle and built from 5/1/96 through 10/31/97.

REASON FOR THIS RECALL

If you are the owner, this is to notify you that the front steer axle tie rod on your vehicle can have a defect, which if not corrected, can allow the tie rod end to separate from the tie rod tube. The separation of a tie rod end could result in loss of steering control and cause a vehicular accident without warning which could result in personal injury, property damage, or both.

ACTION YOU SHOULD TAKE

Navistar estimates that dealers will have parts to correct vehicles with this defect by April 12, 1999. After that date, you are requested to contact your International dealer for an appointment to bring your vehicle, along with the enclosed card, to your dealer to remedy the defect. The remedy will be to replace the front steer axle tie rod assembly. The repair will require approximately 0.8 hour of repair time.

IMPORTANT - PLEASE NOTE

If the vehicle will not or cannot be corrected, please mark on the enclosed card under "CHECK ONE", the box which best describes why the vehicle will not be repaired and return the postage-prepaid card to us. In the event you no longer own the vehicle described on the card, please fill in the new customer name and address, if known, and return it to us. This information will allow us to update our records so that you will not be contacted again regarding this recall.

(OVER PLEASE)

IF YOU NEED ASSISTANCE

If you take your vehicle to your International dealer on a mutually agreed upon service date, and he does not remedy this condition without charge on that date or within five days, you can obtain assistance by following the procedure described in the Owner Assistance Guide section in your Owner's Manual or by calling toll free 1-800-448-7825. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC, 20590, or call the toll-free Auto Safety Hot Line at 1-800-424-9393 (Washington, DC area residents may call 386-0123) if your dealer or International fails or is unable to remedy this condition without charge or within a reasonable time.

We request your prompt attention to correction of this defect and apologize for any inconvenience it may cause you.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.